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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,178	10/21/2005	Alan Timothy Gibbs	30451/04014	7862
24024 7590 03/11/2008 CALFEE HALTER & GRISWOLD, LLP 800 SUPERIOR AVENUE SUITE 1400 CLEVELAND, OH 44114				
EXAMINER				
VENNF, DANIEL V				
ART UNIT		PAPER NUMBER		
3617				
MAIL DATE		DELIVERY MODE		
03/11/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/554,178

Applicant(s)

GIBBS, ALAN TIMOTHY

Examiner

DANIEL V. VENNE

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2 and 4-9 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 21 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/31/2008 has been entered.

An amendment was received from applicant on 8/6/2005.

2. Claim 1 is amended.
3. Claims 3 and 10 are cancelled.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gere et al. (US 5590617), in view of Caserta et al. Gere et al. discloses a planing hull [16], marine propulsion unit [54], powered assisted transversely mounted steering element having a rack (rack and pinion steering system) [150] with actuating rod [152] mounted to a rack arm of a rack of the steering element and arranged for transverse movement, flexible coupling means (push-pull cable) [176] connecting the actuating rod

to a steerable part of a marine propulsion unit, and wheel links arranged to fold upwards on retracting the wheels, as generally recited (see Figs. 1-3, 6, 7-9, and 11-13). Gere et al. (in col. 12, lines 30-35 and Fig. 13) indicates that the cable [176] is mounted to the rack and pinion steering unit [152] and the marine drive steering gate [177] such that when the rack and pinion unit [152] moves in a side to side direction, the steering cable manipulates the steering gate to control the direction of thrust. Although Gere et al. does not explicitly disclose that the actuating rod is mounted to a rack arm of a steering rack, the indicated side to side movement of the rack and pinion unit implies that the actuating rod for all practical purposes is mounted to a rack arm of the steering rack, since any structure to which the actuating rod is mounted at the rack and pinion steering unit for effective side to side movement can be considered a rack arm of a steering element rack within a rack and pinion steering system. Moreover, applicant has not sufficiently shown how mounting an actuating rod to a specific rack arm is advantageous over mounting of an actuator rod in other rack and pinion steering systems known in the art. Gere et al. does not explicitly disclose that the push-pull cable is coupled to the actuating rod through a bell crank means and the actuating rod connects the bell crank means to the steering element. However, bell cranks are known in the art and any means used to couple the push-pull cable to the actuating rod and further to the steering element via the actuating rod is considered substantially equivalent to a bell crank means, since applicant has not sufficiently shown how a bell crank is an essential or critical mounting feature to any suitable coupling means known in the art. Gere et al. does not explicitly disclose that the steering of the wheels and the

marine propulsion unit steering are arranged to be operated simultaneously, although it appears from the disclosure that road and marine steering are capable of being operated simultaneously, at least during road use. However, Caserta et al. discloses an amphibious vehicle with wheels and marine propulsion unit steering arranged to be operated simultaneously, as claimed (See Fig. 9 and col. 2, lines 19-23). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide simultaneous wheel and marine propulsion unit steering with Gere et al. as disclosed by Caserta et al. to create the invention as claimed by applicant. The motivation would have been to improve upon the steering capability for the watercraft, especially during transition from marine mode to land mode of operation.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gere et al. (US 5590617), in view of Caserta et al. (US 5727494) with respect to claim 1, and further in view of Bufler Ernst (DE 3820967 A1). Gere et al. in view of Caserta et al. discloses all of the claimed features as indicated above, with the exception of being fitted with more than one steered axle, as claimed. Bufler Ernst (cited by applicant) shows more than one steered axle with steering provided in part by cable means [9]. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide an additional steerable means for the wheels on the secondary axle as taught by Bufler Ernst by modifying the cable connections and mechanisms of Gere et al. to include

steering capability for the additional axle. The motivation would have been to provide a more versatile and maneuverable vehicle for land operation.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gere et al. (US 5590617), in view of Caserta et al. (US 5727494) with respect to claim 1. Gere et al. in view of Caserta et al. discloses all of the claimed features as indicated above, with the exception of being fitted with more than one steered marine propulsion unit. Providing more than one marine propulsion unit is considered a design choice depending on power needs and performance desired for use for marine operation. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to provide an additional marine propulsion unit with Gere et al. as a design choice. The motivation would have been to provide a more versatile, maneuverable and powerful vehicle for water operation.

Response to Arguments

8. Applicant's arguments filed 1/31/2008 have been fully considered but they are not persuasive. Applicant argues in light of the amended independent claim 1, that the prior art does not disclose, teach or suggest the recited configured limitation for the mounting of the actuator rod to a rack arm of the steering element rack. Examiner disagrees. Gere et al. (in col. 12, lines 30-35 and Fig. 13) indicates that the cable [176] is mounted to the rack and pinion steering unit [152] and the marine drive steering gate [177] such that when the rack and pinion unit [152] moves in a side to side direction, the steering cable manipulates the steering gate to control the direction of thrust. The side

Art Unit: 3617

to side movement of the rack and pinion unit can be considered to imply that the actuating rod is mounted (or connected) to a rack arm of the steering rack, since any structure to which the actuating rod is mounted at the rack and pinion steering unit for effective side to side movement can be considered a rack arm of a steering element rack within a rack and pinion steering system. Moreover, applicant has not sufficiently shown how mounting an actuating rod to a specific rack arm is advantageous over mounting of an actuator rod in other rack and pinion steering systems known in the art.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel V. Venne whose telephone number is (571) 272-7947. The examiner can normally be reached between 7:30AM - 4:00PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 3617

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (In USA or CANADA) or 571-272-1000.

DVV

/Lars A Olson/

Primary Examiner, Art Unit 3617